

## WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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C07K 14/00, C12P 21/06		(43) International Publication Date: 19 October 2000 (19.10.00
(21) International Application Number: PCT/US  (22) International Filing Date: 6 April 2000 (color)  (30) Priority Data: 60/128,701 9 April 1999 (09.04.99) 60/142,821 8 July 1999 (08.07.99) 60/149,448 18 August 1999 (18.08.99) 60/164,751 12 November 1999 (12.11.9)  (71) Applicant (for all designated States except US): GENOME SCIENCES, INC. [US/US]; 9410 K Avenue, Rockville, MD 20850 (US).  (72) Inventors; and (75) Inventors/Applicants (for US only): RUBEN, State [US/US]; 18528 Heritage Hills Drive, Olney, M (US). NI, Jian [CN/US]; 5502 Manorfield Road, F MD 20853 (US). KOMATSOULIS, George [US/U Garwood Street, Silver Spring, MD 20901 (US). Craig, A. [US/US]; 22400 Rolling Hill Road, Lay MD 20882 (US). SOPPET, Daniel, R. [US/US] Stillfield Place, Centreville, VA 22020 (US).	06.04.0  HUMA  Key W  even,  fiD 208  Rockvii  US]; 95  ROSE  ytonsvii  Science	BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM GA, GN, GW, ML, MR, NE, SN, TD, TG).  IAN Vest  Published  With declaration under Article 17(2)(a); without abstract title not checked by the International Searching Authority.  M. 1832 Tille, 15518 EN, 1611e, 16550

(54) Title: UNCOUPLING PROTEINS

## What Is Claimed Is:

- 1. An isolated nucleic acid molecule comprising a polynucleotide selected from the group consisting of:
- (a) the polynucleotide shown as SEQ ID NO:X or the polynucleotide encoded by a cDNA included in ATCC Deposit No:Z;
- (b) a polynucleotide encoding a biologically active polypeptide fragment of SEQ ID NO:Y or a biologically active polypeptide fragment encoded by the cDNA sequence included in ATCC Deposit No:Z;
- (c) a polynucleotide encoding a polypeptide epitope of SEQ ID NO:Y or a polypeptide epitope encoded by the cDNA sequence included in ATCC Deposit No:Z;
- (d) a polynucleotide capable of hybridizing under stringent conditions to any one of the polynucleotides specified in (a)-(c), wherein said polynucleotide does not hybridize under stringent conditions to a nucleic acid molecule having a nucleotide sequence of only A residues or of only T residues.
- 2. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide comprises a nucleotide sequence encoding a soluble polypeptide.
- 3. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide comprises a nucleotide sequence encoding the sequence identified as SEQ ID NO:Y or the polypeptide encoded by the cDNA sequence included in ATCC Deposit No:Z.

- (b) a polypeptide fragment of SEQ ID NO:Y or the polypeptide encoded by the cDNA;
- (c) a polypeptide epitope of SEQ ID NO:Y or the polypeptide encoded by the cDNA; and
  - (d) a variant of SEQ ID NO:Y.
- 12. The isolated polypeptide of claim 11, comprising a polypeptide having SEQ ID NO:Y.
- 13. An isolated antibody that binds specifically to the isolated polypeptide of claim 11.
- 14. A recombinant host cell that expresses the isolated polypeptide of claim 11.
  - 15. A method of making an isolated polypeptide comprising:
- (a) culturing the recombinant host cell of claim 14 under conditions such that said polypeptide is expressed; and
  - (b) recovering said polypeptide.
  - 16. The polypeptide produced by claim 15.
- 17. A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polypeptide of claim 11 or the polynucleotide of claim 1.

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